

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,664 11/08/2001		11/08/2001	David A. Spivak	9926 Spivak 7647	
25547	7590	02/25/2004		EXAMINER .	
PATENT D		MENT BROOKS & PHILLI	WOOD, ELIZABETH D		
P.O. BOX 2471			ART UNIT	PAPER NUMBER	
BATON RO	UGE, LA	A 70821-2471		1755	

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
₩ %	10/005,664	SPIVAK, DAVID A					
Office Action Summary	Examiner	Art Unit					
	Elizabeth D. Wood	1755					
The MAILING DATE of this communication							
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	NN. R 1.136(a). In no event, however, may a reply be ti reply within the statutory minimum of thirty (30) da riod will apply and will expire SIX (6) MONTHS fron atute, cause the application to become ABANDONI	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on _							
<u> </u>	 Γhis action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is							
closed in accordance with the practice und	er <i>Ex parte Quayle</i> , 1935 C.D. 11, 4	53 O.G. 213.					
Disposition of Claims							
4) Claim(s) 1-9 is/are pending in the application.							
4a) Of the above claim(s) is/are with							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1 -9</u> is/are rejected.							
7) Claim(s) is/are objected to.		ti e e e e e e e e e e e e e e e e e e e					
8) Claim(s) are subject to restriction an	d/or election requirement.						
Application Papers							
9)☐ The specification is objected to by the Exam	niner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the	Examiner. Note the attached Office	e Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:	eign priority under 35 U.S.C. § 119(a	n)-(d) or (f).					
1. Certified copies of the priority documents have been received.							
Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
	•						
Attachment(s) 1) Notice of References Cited (PTO-892)	Λ\	((DTO 442)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)	ate					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date 11/08/01.	/08) 5) ☐ Notice of Informal I 6) ☐ Other:	Patent Application (PTO-152)					
S Patent and Trademark Office	o)						

Application/Control Number: 10/005,664

Art Unit: 1755

Specification

The examiner has not checked the specification to the extent necessary to determine the presence of **all** possible minor errors (grammatical, typographical and idiomatic). Cooperation of the applicant(s) is requested in correcting any errors of which applicant(s) may become aware of in the specification, in the claims and in any future amendment(s) that applicant(s) may file.

Applicant(s) is also requested to complete the status of any copending applications referred to in the specification by their Attorney Docket Number or Application Serial Number, if any.

The status of the parent application(s) and/or any other application(s) cross-referenced to this application, if **any**, should be updated in a timely manner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Application/Control Number: 10/005,664

Art Unit: 1755

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over either the Ikenaga et al. document or the Hiyama et al. document.

Applicant's invention involves a process for cross-coupling an aryldiazonium salt with an aryl silane in the presence of a palladium catalyst.

Each of the references discloses processes for reacting aryldiazonium salts with compounds such as alkenylsilanes. Applicant's invention would have been obvious because it is considered that these silane compounds read on the instantly claimed aryl silane species which does not exclude the reactants disclosed by the prior art. See particularly page 1959 of Ikenaga et al. and page 422 of Hiyama et al.

Regarding limitations such as recovery of product, such is considered to be so standard in any technology as to have been obvious. Limitations such as "essentially free" of fluoride are considered met by the references because they are not closed to minor amounts from catalytic anions or reactant ligands that do not affect the basic and novel characteristics of the invention.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Spivak et al. documents listed as abstract and "poster". (They are being

Application/Control Number: 10/005,664

Art Unit: 1755

referred to herein as a single document because they appear drawn to identical subject matter).

Applicant's invention involves a process for cross-coupling an aryldiazonium salt with an aryl silane in the presence of a palladium catalyst.

The reaction can further take place in the presence of Palladium (II) salt catalysts and methanol solvent.

The references teach cross-coupling alkyl entoleters with arenediazonium salts. Applicant's invention would have been obvious because it is considered that the silane compounds read on the instantly claimed aryl silane species which does not exclude the reactants disclosed by the prior art. The arene diazonium salts are also not excluded by the reference disclosure. See particularly the abstract.

Regarding limitations such as recovery of product, such is considered to be so standard in any technology as to have been obvious. Limitations such as "essentially free" of fluoride are considered met by the references because they are not closed to minor amounts from catalytic anions or reactant ligands that do not affect the basic and novel characteristics of the invention.

Conclusion

Applicant is advised that any evidence to be provided under 37 CFR 1.131 or 1.132 and any amendments to the claims and specification should be submitted prior to final rejection to be considered timely. It is anticipated that the next office action will be a final rejection.

Art Unit: 1755

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth D. Wood whose telephone number is 571-272-1377. The examiner can normally be reached on M-F, 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 571-272-1364. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elizabeth D. Wood Primary Examiner Art Unit 1755

edw